



## Crop and pasture response to climate change

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### Abstract:

We review recent research of importance to understanding crop and pasture plant species response to climate change. Topics include plant response to elevated CO<sub>2</sub> concentration, interactions with climate change variables and air pollutants, impacts of increased climate variability and frequency of extreme events, the role of weeds and pests, disease and animal health, issues in biodiversity, and vulnerability of soil carbon pools. We critically analyze the links between fundamental knowledge at the plant and plot level and the additional socio-economic variables that determine actual production and trade of food at regional to global scales. We conclude by making recommendations for current and future research needs, with a focus on continued and improved integration of experimental and modeling efforts.

**Source:** <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2148358>

### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Food/Water Security, Food/Water Security

**Food/Water Security:** Agricultural Productivity

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Global or Unspecified

#### Health Impact:

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

#### Mitigation/Adaptation:



mitigation or adaptation strategy is a focus of resource

Adaptation

## **Model/Methodology:**

type of model used or methodology development is a focus of resource

Methodology

## **Population of Concern:** A focus of content

## **Resource Type:**

format or standard characteristic of resource

Review

## **Timescale:**

time period studied

Time Scale Unspecified

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content